

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 2, and 4-13 are presently active in this case, Claims 1, 2, and 8 having been amended and Claims 10-13 having been added by way of the present Amendment. Care has been taken such that no new matter has been entered. (See, e.g., pages 9, 10, and 13, of the present application.)

In the outstanding Official Action, Claim 2 was objected to for a minor informality. The Applicants submit that Claim 2 has been clarified. (See page 6, lines 2-3, of the present application.) Thus, the Applicants request the withdrawal of the objection to Claim 2.

Claims 1, 2, 4-7, and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Takachi (U.S. Patent App. Pub. No. 2003/0137595) in view of Tazunoki et al. (U.S. Patent No. 5,191,224). Claim 8 was rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (U.S. Patent No. 2002/0044215) in view of Tazunoki et al. For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejections.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of

obviousness cannot be established in the present case because the cited references, either when taken singularly or in combination, do not teach or suggest all of the claim limitations.

Claim 1 of the present application recites an image pickup apparatus comprising, among other features, a first connector, a second connector including an optical lens, and a photoelectric conversion module including a photoelectric conversion element which has an electrode located on an optical lens side and on which light from the optical lens is incident. The image pickup apparatus further comprises a positioning member determining relative positions of the first connector, second connector and photoelectric conversion module, and a spring electrode electrically connected to a terminal of the photoelectric conversion module. The Applicants submit that the cited references, either when taken singularly or in combination, fail to disclose or suggest all of the above limitations.

The Takachi reference describes a package (3) accommodating an image sensing device (4) that is integrally combined with an optical component holding member (8a). The Official Action cites an engagement step portion (15) of the Takachi reference for the teaching of the first connector of Claim 1, package (3) for the teaching of the wiring board, engagement claw (16) for the teaching of the second connector, and image sensing device (4) for the teaching of the photoelectric conversion module.

The Applicants submit that the Takachi reference does not disclose or suggest an electrode located on an optical lens side of a photoelectric conversion element, as recited in Claim 1 of the present application. The Official Action suggests that several electrodes are inherently provided on various features of the image pickup device of the Takachi reference, however, the Applicants note that it would not be inherent that such an electrode would be

provided on the optical lens side of the image sensing device (4) of the Takachi reference, since no connector is provided on the upper side of the device as depicted in the figures.

Furthermore, the Takachi reference fails to disclose a positioning member determining relative positions of the first connector, second connector and photoelectric conversion module. As noted above, the Official Action cites the engagement step portion (15) of the Takachi reference for the teaching of the first connector, the engagement claw (16) for the teaching of the second connector, and the image sensing device (4) for the teaching of the photoelectric conversion module. No other structural member is provided that determines the relative positions of the engagement step portion (15), the engagement claw (16), and the image sensing device (4).

Additionally, the Applicants submit that the Tazunoki et al. reference does not supplement the deficiencies in the teachings of the Takachi reference discussed above. Firstly, the Applicants submit that the packaging configuration described in the Tazunoki et al. reference is significantly different from the image pickup device described in the Takachi reference. One of ordinary skill in the art would not, and in fact likely could not, utilize the mounting configuration of the Tazunoki et al. reference with the image pickup device of the Takachi reference. It does not appear that the Tazunoki et al. reference includes a first connector, a second connector engageable with the first connector, and a photoelectric conversion module, and thus the Tazunoki et al. reference clearly does not include a positioning member determining relative positions of the first connector, second connector and photoelectric conversion module, as recited in Claim 1 of the present application.

Thus, the combination of the Takachi reference and the Tazunoki et al. reference fails to establish a *prima facie* case of obviousness, since the cited references, either when taken singularly or in combination, fail to disclose all of the limitations recited in Claim 1. Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection of Claim 1.

Claims 2, 4-7, and 9 are considered allowable for the reasons advanced for Claim 1 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 1.

Claim 8 of the present application recites a method for manufacturing an image pickup apparatus comprising, among other features, an installation step of arranging a first connector and an electronic component on a wiring board, and an assembly step performed when the first connector and a second connector are brought into engagement and including inserting a photoelectric conversion module between the first connector and the second connector, and determining relative positions of the first connector, second connector and photoelectric conversion module by a positioning member. The Applicants submit that the cited references, either when taken singularly or in combination, fail to disclose or suggest all of the above limitations.

The Takagi et al. reference describes a solid-state imaging device. The Official Action cites wires (4) of the Takagi et al. reference for the teaching of the first connector of Claim 8, electrode (19) and lens fixing member (12) for the teaching of the second connector, and bare IC (6) and solid-state imaging device (3) for the teaching of the photoelectric

conversion module. The Applicants submit that the Takagi et al. reference fails to disclose a positioning member determining relative positions of the first connector, second connector and photoelectric conversion module. As noted above, the Official Action cites the wires (4) of the Takagi et al. reference for the teaching of the first connector of Claim 8, electrode (19) and lens fixing member (12) for the teaching of the second connector, and bare IC (6) and solid-state imaging device (3) for the teaching of the photoelectric conversion module. No other structural member is provided that determines the relative positions of these features.

Additionally, the Applicants submit that the Tazunoki et al. reference does not supplement the deficiencies in the teachings of the Takagi et al. reference discussed above. Firstly, the Applicants submit that the packaging configuration described in the Tazunoki et al. reference is significantly different from the image pickup device described in the Takagi et al. reference. One of ordinary skill in the art would not, and in fact likely could not, utilize the mounting configuration of the Tazunoki et al. reference with the solid-state imaging device of the Takagi et al. reference. It does not appear that the Tazunoki et al. reference includes a first connector, a second connector enagageable with the first connector, and a photoelectric conversion module, and thus the Tazunoki et al. reference clearly does not include a positioning member determining relative positions of the first connector, second connector and photoelectric conversion module, as recited in Claim 8 of the present application.

Thus, the combination of the Takagi et al. reference and the Tazunoki et al. reference fails to establish a *prima facie* case of obviousness, since the cited references, either when taken singularly or in combination, fail to disclose all of the limitations recited in Claim 8.

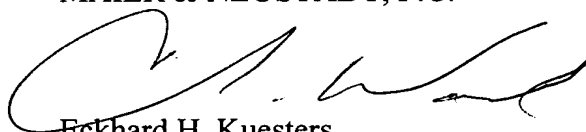
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Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection of Claim 8.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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